

DOCKET FILE COPY ORIGINAL

RECEIVED

Before the
FEDERAL COMMUNICATIONS COMMISSION MAY - 1 2001
Washington, D.C. 20554

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of

Amendment of Section 97.201(b) of the
Commission's Rules Regarding Auxiliary
Operation in the Amateur Service

:
:
:
:
:

RM- _____

To: Chief, Public Safety and Private Wireless
Division, Wireless Telecommunications Bureau

PETITION FOR RULE MAKING

Kenwood Communications Corporation ("Kenwood"), petitioner, is a manufacturer of a variety of commercial and amateur radio communications equipment for use throughout the world, including the United States. This Petition for Rule Making seeks a single modification of the Commission's rules governing the amateur service, Section 97.201(b), to permit increased flexibility in the use of amateur bands by relaxation of a restriction on auxiliary station operation. Kenwood requests that auxiliary amateur radio station operation be permitted on amateur frequencies above 144.5 MHz, except 145.8-146.0 MHz, 219-220 MHz, 222.0-222.150 MHz, 431-433 MHz and 435-438 MHz. The effect of this rule change would be to permit auxiliary operation in the two-meter amateur band, except in segments used by convention and accepted band plan for SSB and CW operation and for amateur satellite operation.

This proposed rule change would increase the flexibility afforded amateur radio licensees in the use of their own allocations, and would not have any adverse effect on other services or on amateur radio stations in the use of the popular 2-meter band. It would allow the development and use by amateurs of new technology devices, and increase the utility of the limited amateur allocations.

As a general principle, amateur radio operators are permitted to use their shared bands cooperatively, and informally, without the intervention of the Commission, or the need for detailed rules. Some restrictions on amateur operation do exist in the rules, however, which developed historically, and which are now better deregulated. Planning and subdividing of amateur bands is, in general, best left to amateurs themselves. The American Radio Relay League, for example, has established band plans which adequately address the use of competing technologies and operating modes, allowing frequency separation of incompatible amateur

No. of Copies rec'd 014
List A B C D E
W T B

01-32

station operations. These national band plans are widely followed and reflect cooperatively adopted conventions in amateur station operation. They are especially effective at VHF and UHF. There are also local band plans which address the needs and interests of amateurs at the local level. These work well, and are relied on by the Commission in lieu of detailed regulation of amateur bands. They are also relied on by the Commission's Enforcement Bureau.

Amateur auxiliary operation is poorly defined in the Commission's Rules, and there are presently limitations on auxiliary operation in amateur bands which can and should be withdrawn in order to enhance amateur operation in the 2-meter VHF band.

As an example, Kenwood, which has for a long time been a major manufacturer of base, mobile, and portable equipment used in amateur radio operations, developed an innovative product which allows remotely controlled operation of an amateur base station as well as regular voice transmissions using portable and mobile amateur transceivers. Specifically, the device is used at remote locations by licensed amateur radio operators to key in commands for establishing contact with, and controlling, a base station on the appropriate telecommand frequencies in the 70 cm band. The device is then used in the FM voice mode on that band to conduct voice transmissions from the remote location through the base station transmitter. Audio is returned from the base receiver unit by transmitting it to the remote portable or mobile transceiver in the 2-meter band. It allows an amateur HF station to be used remotely. This type of device is used on the two most popular amateur bands on which portable and mobile amateur transceivers are operated, the 2-meter band and the 70-centimeter band. It is an innovative system, useful in a variety of contexts, especially in emergency and disaster relief communications.

The Commission has determined, notwithstanding the unclear and outdated definition of "auxiliary station" set forth in Section 97(a)(7) of the amateur service rules, that this device as configured, when interconnected with an HF base station in the 2-meter and 70-centimeter bands, is an "auxiliary station" (Order, DA 00-1662, released July 28, 2000 by the Chief, Public Safety and Private Wireless Division).

That determination did not address the utility of modifying the frequency restriction on auxiliary operation in the Commission's rules. As with any type of regulation, the Commission's rules adopted through formal proceedings often use broad definitions and general descriptions of types of operations and activities which are generally understood in the industry. This method allows innovation and expansion of technologies without necessitating new rules. However, the Commission's current regulatory scheme - particularly given the historical development of provisions allowing "remote", "auxiliary", and "repeater"

operations, leads to the inevitable conclusion that "auxiliary" operation in the Amateur Service is significantly overregulated. The Commission's continuous trend in amateur radio regulation has been toward less regulation and encouragement of more efficient and more flexible current technologies. Limiting auxiliary operation to bands above 222.5 MHz, as the current Section 97.201(b) now does, is contrary to that trend.

The frequency restriction for auxiliary stations might have been appropriate when the only purpose of an auxiliary station was to control repeaters or remote base stations, and when auxiliary links were installed permanently, in fixed, point-to-point configurations. Limiting those facilities to bands other than the popular 2-meter band was useful at the time, in order to preserve the 2-meter band for primary communication channels only.

Now, however, the 2-meter band is used flexibly for a variety of different types of communications, including packet-forwarding links, FM voice, and repeaters. There are simplex channels set aside in band plans for point-to-point FM operation which could easily accommodate newer types of itinerant auxiliary operation, such as mobile and portable links to base stations for remotely controlling and conducting HF station operation. Data links for the same purpose are coming along, and the regulatory relief requested here would encourage flexible use of software-controlled radio facilities.

In a rulemaking proceeding more than 25 years ago, the Commission first acknowledged the development of various types of ancillary amateur operations. Separate license categories were specifically created for repeater stations, control stations, auxiliary link stations, and secondary stations.¹ The Commission explained their differences thus:

Repeater station privileges may not be combined with another station license because of their distinctive call sign assignment. A control station privilege authorizes the station to exercise control over a remotely controlled station. An auxiliary link station authorizes a station to relay a radio signal point-to-point within the same system network. Either or both may be combined with a primary station for the same location. A secondary station license is for a station at a different location, such as a vacation home, and is obviously a license issued in addition to the

¹ *Amendment of Part 97 of the Commission's Rules Concerning the Licensing and Operation of Repeater Stations in the Amateur Radio Service*, Report and Order, 37 FCC.2d 225, 228 ¶8 (1972). This provision was codified as 47 C.F.R. §97.40.

primary license.²

With regard to the repeater stations (which were then allowed only as intra-community boosters on specified frequency bands,³ and which could only be used for repeater - as opposed to original transmission - operations⁴), the Commission distinguished between control functions and access functions as follows:

We do not consider access to a repeater station controlled by the users via coded signals alone on the receiving frequency to be active supervisory control by the control operator. Such coded signals are permissible for secondary control but are not required.⁵

With regard to the newly-authorized remote control operation, the Commission required that a specific control point location for non-wireline remote control had to be designated by the operator. Furthermore, control stations and auxiliary link stations could only be used to communicate with other stations designated in the system network diagram.⁶ Finally, in order to "minimize the prospect of interference to radiocommunication already in progress on a given frequency," operators had to conduct "continuous monitoring of the frequencies while in operation".⁷

Five years later, the Commission drastically altered the foregoing licensing scheme. It noted:

We are eliminating separate repeater, auxiliary link, and control station licenses, as proposed. Operations now conducted by such stations will be authorized other stations without prior Commission approval under new forms of amateur operation to be known as "repeater operation" and "auxiliary operation".⁸

The Commission also relaxed the fixed control point requirement:

We are authorizing auxiliary operation from control points in portable and mobile operation. This amendment, which was unopposed by the comments, will afford operators of remotely controlled stations much

² 37 FCC.2d at 228 ¶18.

³ 47 C.F.R. §§ 97.61, 97.109, 97.110 (1972).

⁴ 47 C.F.R. §97.111(e) (1972).

⁵ *Id.* at 230 ¶16.

⁶ 47 C.F.R. §97.89(d) (1972).

⁷ *Id.* at 231 ¶19.

⁸ *Deregulation of Part 97 of the Commission's Rules to simplify the licensing and operation of complex systems for stations and modify repeater subbands in the Amateur Radio Service, Report and Order, 66 FCC.2d 207, 212 ¶6.a. (1977).*

greater flexibility in their operations. It will permit operators of remotely controlled stations to operate their stations as they would locally controlled stations, without many of the previous restrictions placed on them.^{3/}

3/ We do not believe separate regulations for so-called "remote base" stations are necessary or desirable at this time. As long as the auxiliary functions of such stations comply with the regulations for auxiliary operation, remote bases may be operated⁹ in the same manner as other amateur stations.⁹

Although the separate licenses were abolished, the rules continued to require that repeater and auxiliary functions be performed on specified frequency bands.¹⁰

A major revision of Part 97 again occurred in 1989.¹¹ In the Notice of Proposed Rule Making, the Commission summarized the rationale for permitting remote control operation as follows:

In some cases, particularly in instances where an amateur station is situated on a hilltop or atop a tall building, it is neither desirable nor practical to have the control operator physically present at the transmitter site. The control operator may perform the necessary duties from a remote control point through a control link. This control link can be a dedicated wire line or public telephone interconnection from the control point to the remotely controlled station. Alternatively, an amateur station in auxiliary operation at the control point can be used to transmit control commands to the remotely controlled station. See 47 C.F.R. § 97.88 (radio remote control of an amateur station). We redrafted this rule as proposed Section 97.307.¹²

Other than minor editorial amendments, the regulatory scheme

⁹Id. at 213 ¶6.b.

¹⁰47 C.F.R. §97.61 (1977).

¹¹*Reorganization and Deregulation of Part 97 of the Rules Governing the Amateur Radio Services*, Report and Order, 4 FCC Rcd 4719 (1989).

¹²Notice of Proposed Rule Making, 3 FCC Rcd 2076, 2080 §44 (1988). The Commission also proposed to delete the requirement that the control operator continuously monitor the station's transmitting and receiving frequencies. See 3 FCC Rcd at 2080 §45. The redrafted rule was codified substantially as proposed at 47 C.F.R. §97.213 (1989).

for auxiliary operation has not changed since 1989. From this review of the history of remote control and auxiliary operation, it is clear that the Commission has consistently relaxed its rules to encourage new means of conducting amateur operations. Most striking is the fact that, while remote control and auxiliary operations could only be conducted on an exclusive basis under the 1972 rules, the exclusivity provision was removed in 1977. Since that time, there has never been an explicit prohibition on performing remote/auxiliary operations from a station simultaneously used for voice and data transmissions. Rather, the rules have distinguished stations in "repeater operation" and "auxiliary operation" from stations conducting the substance of amateur communications. There has been no statement that the same station could not be used for different operations. It is now time to take the next logical step in the progress of deregulation of amateur auxiliary stations and to relieve the strict frequency limitations applied to auxiliary stations.

These frequency limitations developed historically, together with the repeater rules. In 1977, the Commission issued a *Report and Order* in Docket 21033, (66 FCC 2d 207) which made available an additional 1 MHz of spectrum for repeater operation in the 2-meter band. The Commission said:

It is clear from the comments that amateurs engage in a wide variety of activities and that repeater operation is but one of these activities. It is also clear that many amateurs believe their activities must be protected from possible encroachment by stations in repeater operation. For this reason, we will not adopt our proposal to make all amateur frequencies available for repeater and auxiliary operation. The pervasive opposition to our proposed relaxation convinces us that the Amateur Service is not fully prepared to assume responsibility for complete management of its own spectrum. We are therefore not allocating any additional frequencies for repeater operation or auxiliary operation below 144 MHz...

We are also making all amateur frequencies above 220 MHz, except 435-438 MHz, available for both repeater and auxiliary operation. There was little, if any, opposition to an increase in the frequencies available for repeater operation above the 2-meter band, and we believe that in making all amateur frequencies above 220 MHz available for repeater and auxiliary operation we are providing amateur licensees with a great degree of flexibility while at the same time continuing to protect the "weak signal" two meter activity. We will continue to evaluate the spectrum requirements for repeater and auxiliary operation, however.

That order changed the rules so that, among other changes, a new Section 97.61(d) was added to read as follows: "(d) all amateur frequency bands above 220.0 MHz, except 435-438 MHz, are available for auxiliary operation."

On reconsideration (67 FCC 2d 1107) in 1978, the Commission said:

It has become apparent from the several petitions for reconsideration that we should set aside additional frequency ranges that would be free from repeater operation. We will therefore not allow repeater or auxiliary operation in the 220.0-220.5 MHz and 431-433 MHz ranges. According to the petitioners, these subbands contain the bulk of the experimentation with moonbounce and satellite transmissions being carried out today.

The bottom range for auxiliary operation was modified upward to 222.5 MHz after the 220-222 MHz band was withdrawn from amateur use, but no other policy changes were made with respect to it.

In 1985, the Quarter Century Wireless Association (QCWA) filed a rulemaking petition asking that auxiliary operation on virtually all amateur frequencies be permitted. The Commission issued a Notice of Proposed Rule Making in response to it, but in 1986 determined that interference concerns relating to auxiliary operation at MF and HF frequencies, and in the 6-meter band, where skywave interference occurs regularly, made the QCWA proposal inadvisable (60 Pike & Fisher Radio Regulation 2d 249). Kenwood agrees that auxiliary operation in the MF and HF bands, and at 6 meters, is inappropriate due to potential skywave interference, and that the QCWA petition went too far.

The objections to the QCWA petition, however, do not hold true for the 2-meter band. The ARRL argued in 1986, in the QCWA proceeding, that band crowding at 2 meters made auxiliary operation inadvisable in that band. While Kenwood agrees that the 2-meter band is crowded in many parts of the country, auxiliary operation, especially the short-duration, itinerant type of auxiliary operation envisioned by Kenwood for newer technological developments, can be accommodated on FM simplex frequencies, in accordance with the ARRL, or local, band plans. Indeed, that is the benefit of those band plans. Compatible uses can be combined in the FM simplex channels, including short-term itinerant auxiliary operation, without precluding or interfering with other types of ongoing amateur communications. Kenwood believes that the amateur service is now able and "prepared to assume responsibility for complete management of its own spectrum". It also believes that the minor relief of regulatory restrictions proposed in this Petition is appropriate and reasonable to encourage experimentation and to make the amateur rules as flexible as

possible, consistent with interference avoidance.

Therefore, Kenwood requests that the Commission modify Section 97.207(b) of the amateur rules, which presently reads as follows:

§97.201 Auxiliary station.

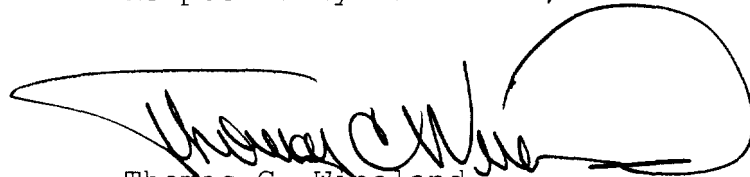
(b) An auxiliary station may transmit only on the 1.25 m and shorter wavelength bands, except the 220.0-220.5 MHz, 431-433 MHz and 435-438 MHz segments.

so that it will read as follows:

§97.201 Auxiliary station.

(b) An auxiliary station may transmit only on the 2 m and shorter wavelength bands, except the 144.0-144.5 MHz, 145.8-146.0 MHz, 220.0-220.5 MHz, 431-433 MHz and 435-438 MHz segments.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Thomas C. Wineland', with a large, sweeping loop at the end.

Thomas C. Wineland
President
Kenwood Communications Corporation
3975 Johns Creek Ct., Suite 300
Suwanee, Georgia 30024
(678) 474-4700

Date: APR 30 2001